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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,125	11/12/2003	Jasdeep Sohi	HSTI 0139 PUSP / H 50028	6225
35312	7590	04/28/2006	EXAMINER	
BROOKS KUSHMAN P.C./ HENKEL CORPORATION 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075-1238			ZHENG, LOIS L	
			ART UNIT	PAPER NUMBER
			1742	

DATE MAILED: 04/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/706,125	Applicant(s) SOHI ET AL.	
	Examiner Lois Zheng	Art Unit 1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 13-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/4/04, 4/22/04</u>   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-12, drawn to a method, classified in class 148, subclass 243.
  - II. Claims 13-21, drawn to a composition, classified in class 106, subclass 14.15.
2. Inventions II and I are related as composition and process of using the composition. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the composition as claimed can be practiced with another materially different composition or (2) the composition as claimed can be used in a materially different process of using that composition. In the instant case the claimed composition can be used in a materially different process such as a process during which only one passivating coating is applied.
3. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Michael Brodbine on 26 April 2006 a provisional election was made without traverse to prosecute the invention of I, claims 1-12. Affirmation of this election must be made by applicant in replying to this Office action. Claims 13-21 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Kolberg et al. WO 02/70781(i.e. corresponding national entry application publication is 2004/0065389)(Kolberg).

Since Kolberg is the published national entry application of WO 02/70781 and WO 02/70781 is not available in English, the examiner will rely on the disclosure of Kolberg for the teachings of WO02/70781 since they are essentially the same invention.

Kolberg teaches a method for treating metal surfaces such as galvanized steel and aluminum-zinc surfaces to provide anti-corrosive coatings(par[0001-0003],[0058]). Kolberg further teaches that a phosphate coating can be applied to provide temporary protection during storage (par[0002]) and can be followed by a second phosphating treatment(par[0040]). The first phosphating composition as taught by Kolberg comprises 3-300g/l of phosphosphate ions(par[0018],[0046]), 0.01-5g/l of fluorometallate ions(par[0059]), and having a pH of 1 to 4(par[0073]). The first phosphate coating of Kolberg is applied at a temperature of 45-65°C for 3-15 seconds(par[0120]). Kolberg further teaches drying the first phosphate coating as claimed(par[0077]) and that the metallic surface maybe cleaned with an alkaline agent before the first and second phosphating treatments (par[0089]).

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Regarding claims 1 and 11-12, Kolberg's phosphating method anticipates the instant claims, since Kolberg teaches the claimed first treatment step, the claimed drying step, the claimed removing of the primary coating(i.e. via cleaning with an alkaline solution) and the claimed conversion coating step.

Regarding claim 10, the coating temperature of 45-65°C reads on the claimed temperature of 15-66°C.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2 and 4-7 rejected under 35 U.S.C. 103(a) as being unpatentable over Kolberg.

The teachings of Kolberg are discussed in paragraph 6 above.

Regarding claim 2, since the phosphate and fluorometallate concentration, in g/l, as taught by Kolberg reads on the claimed phosphate and fluorometallate concentrations, the inherent ratio of fluorometallate anions and phosphate ions present in the first coating solution of Kolberg overlaps the claimed fluorometallate:phosphate ratio of 0.10:1.0 to 5.0:1.0. Therefore, a prima facie case of obviousness exists. See MPEP 2144.05. The selection of claimed fluorometallate:phosphate ratio range from the disclosed range of Kolberg would have been obvious to one skilled in the art since

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Kolberg teaches the same utilities in its' disclosed fluorometallate:phosphate ratio range.

Regarding claims 3-7, since the phosphate and fluorometallate concentration, in g/l, as taught by Kolberg reads on the claimed phosphate and fluorometallate concentrations, the corresponding wt% of phosphate, fluorometallate and water present in the first coating solution of Kolberg would have overlapped the claimed wt% of phosphate, fluorometallate and water as claimed. Therefore, a prima facie case of obviousness exists. See MPEP 2144.05. The selection of claimed phosphate, fluorometallate and water wt% ranges from the disclosed ranges of Kolberg would have been obvious to one skilled in the art since Kolberg teaches the same utilities in its' disclosed phosphate, fluorometallate and water wt% ranges.

9. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolberg in view of Torok et al. US 4,287,008(Torok).

The teachings of Kolberg are discussed in paragraph 6 above. However, Kolberg does not explicitly teach that the metal surface with the aluminum, zinc and silicon composition as claimed.

Torok teaches that an aluminum-zinc coating containing 55%Al, balance zinc with about 1.6% Si is the optimum composition for coating steel surfaces(24-27).

Regarding claims 8-9, it would have been obvious to one of ordinary skill in the art to have incorporated the Al-Zn coating with 55% Al, balance zinc with about 1.6% Si as taught by Torok into the galvanized coating of Kolberg since Torok teaches that the

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optimum composition for the Al-Zn coated steel is 55% Al balance zinc with about 1.6% Si.

In addition, the Al-Zn coating composition as taught by Kolberg in view of Torok is substantially the same to the claimed Al-Zn coating composition of 55% Al, 43.5% Zn and 1.5% Si. Therefore, one of ordinary skill in the art would have found it obvious that the phosphating process as taught by Kolberg in view of Torok can be applied to the claimed. See MPEP 2144.05.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lois Zheng whose telephone number is (571) 272-1248. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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